



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
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October 9, 2008

Mr. Cris Miller, P.E.  
Basin Electric Power Cooperative  
1717 East Interstate Avenue  
Bismarck, ND 58503-0564

Dear Mr. Cris Miller:

This letter is being sent as a response to the NextGen Project air monitoring data. The department has reviewed the air monitoring data and supporting information. The air monitoring data collected at the Basin monitoring site near Gettysburg for sulfur dioxide, nitrogen oxides, ozone, particulate matter 10 microns and less, and the meteorological parameters appears to be complete in quality and quantity as submitted to the department.

The only exception to this approval is for the particulate matter 2.5 microns and less (PM2.5) data. Basin did not submit a revision of the quality assurance project plan and standard operating procedures adding requirements for the collection of PM2.5 data as the project moved forward for the department to review. The department did not approve the monitoring method because it was not an EPA approved method for the collection of the PM2.5 data.

In addition, the PM2.5 data submitted do not meet the following requirements in 40 CFR Part 58 (Revised as of July 1, 2007):

1. Appendix A, Nt Section 1.1 requires that in most cases the quality assurance requirements for air monitoring at a State Local Air Monitoring Station and Prevention of Significant Deterioration station be the same. Table A-1 of this appendix lists the major similarities and differences. Both programs are required to have an approved quality assurance project plan addressing each air pollutant sampled, provide for the assessment for the data quality in the plan, and use a reference, equivalent, or approved sampling method.

The testing at the Basin Site did not have a written plan for PM2.5 for the department to review and approve. The reported data does not include the necessary data assessment checks and audit frequencies required by sections 1.1.2 and 1.1.3 in Appendix A, Nt. The sampling method used was not an EPA reference, equivalent, or approved method during at least four consecutive quarters.

2. Appendix A, Nt Section 3.2.5.2 (b) requires the co-location of a Federal Equivalent Method to a Federal Reference Method if there is only one co-located site in the project.

The Basin Site did not operate a Federal Reference Method PM2.5 co-located at the site to assess the precision of the Met One PM2.5 monitors.

The Aberdeen Fire Station #1 Site is the closest PM2.5 site in South Dakota at 75 miles from Selby. We did a search for other sites in North Dakota and Bismarck was the closest site but it is a little further than Aberdeen at 97 miles from Selby. The topography between Selby and Aberdeen is flat to gently rolling. The PM2.5 concentrations for Aberdeen are slightly higher than Bismarck which will provide more protection of public health if the Aberdeen data is used for background.

As this site has several years of data the 2005, 2006, and 2007 sampling year data results for PM2.5 should be used to provide a larger data base to calculate the three year annual and 98 percentile concentrations. Attachment 2 in your letter dated September 18, 2008 shows a summary of the Aberdeen Site data. We approve the use of this data to represent the PM2.5 background levels around Selby, South Dakota.

Aberdeen Fire Station #1 Site AQS # 46-013-0003

24-hour 98 percentile PM2.5 three year average =  $18 \text{ ug/m}^3$   
Annual PM2.5 three year average =  $8.4 \text{ ug/m}^3$

If you have questions on this report or have information that would indicate we should reconsider our decision please contact me.

Sincerely,



Brad Schultz  
Senior Scientist  
Air Quality Program  
605-773-6038

cc: Bruce Macdonald ENSR